

**Appendix G:  
Consultation with Emergency Services**



Our Ref: AJH/CJS  
Please ask for: Andy Hill  
Email: [andy.hill@emas.nhs.uk](mailto:andy.hill@emas.nhs.uk)

Mr L Rowley  
Senior Project Leader  
Lincolnshire County Council  
Highways Alliance  
5<sup>th</sup> Floor - Mill House  
Brayford Wharf North  
Lincoln LN1 1YT

TECHNICAL SERVICES PARTNERSHIP		
FILE:		
32 FEB 2015		
ALLOC	INITIALS	DATE

Lincolnshire Divisional Headquarters  
Cross o'Cliff Court  
Bracebridge Heath  
Lincoln  
LN4 2HL  
Telephone: 01522 832601  
Fax: 01522 546834

20<sup>th</sup> February 2015

Dear Mr Rowley

**Re: Lincoln Eastern bypass – Closure of Hawthorn Road**

In July 2011 EMAS responded to the stakeholder consultation regarding the above. My predecessor advised that EMAS fully supported the plans to extend the bypass and his response is enclosed for your information.

In November 2014 EMAS was contacted by the Hawthorn Road Action Group which expressed concerns regarding the proposal to close access from Hawthorn Road to the bypass. EMAS has liaised closely with Lincolnshire Fire and Rescue (LFR) to identify the issues specifically around the closure of the Hawthorn Road access and evaluate any associated consequences. EMAS deploys resources from very similar locations as LFR; consequently the data in relation to travel time/distance applies to both organisations.

The Fire Service has conducted some modeling using the Fire Service Emergency Cover Toolkit and the outcome based on the modeling is as follows:-

Travel times from EMAS deployment location sited at Waitrose (A46), Bishops Court, Outer Circle Road.

- To Reepham – no change
- To Fiskerton – travel time improved
- To Cherry Willingham (Top) – travel time improved
- To Cherry Willingham (Bottom) – travel time improved

The closure of the Hawthorn Road access does not affect return journeys from the above locations to Lincoln County Hospital.

I am, therefore, in a position to advise that EMAS fully supports the proposals as outlined in the letter sent in 2011 and the closure of the Hawthorn Road access will have no negative impact on EMAS response to patients requiring time critical assistance.

I understand that the Fire Service are forwarding the modeling work, consequently I have not included it in this correspondence.

I hope this information is helpful and please do not hesitate to contact me if you have any concerns.

Yours sincerely

**Andy Hill**  
General Manager (Lincolnshire Division)



# East Midlands Ambulance Service

NHS Trust

Our Ref: PJ/RS  
Please ask for: Pete Jones  
Email: [Pete.Jones@emas.nhs.uk](mailto:Pete.Jones@emas.nhs.uk)

Lincolnshire Divisional Headquarters  
Cross o'Cliff Court  
Bracebridge Heath  
Lincoln  
LN4 2HL  
Telephone: 01522 832604  
Fax: 01522 546834

13 July 2011

Mr D Skeet  
Senior Project Leader  
Technical Services Partnership  
Lincolnshire County Council  
Witham Park House  
Waterside South  
Lincoln LN5 7JN

Dear David

## Re: Lincoln Eastern Bypass, Stakeholder Consultation Process

I am responding on behalf of East Midlands Ambulance Service NHS Trust regarding the above. In general EMAS welcomes any initiative which supports speedy access to patients within the community and onward transportation to places of definitive care. Specific comments are as follows:

- *What are the key problems and constraints on your business/organization resulting from the current transport situation?*

Traffic congestion both north and south of the city at peak times impacting upon EMAS ability to respond to patients within required timescales. EMAS currently deploys resources to standby sites at various locations within Lincoln City boundary to mitigate against congestion related delays. Problems will occur, however, when resources at north or south of the City are fully utilized and EMAS is required to respond across town to emergencies. On such occasions problems are encountered on Broadgate due to traffic congestion and road width, which can result in delays of a few minutes pending lights changing to green.

EMAS is also required to transport patients between various hospital sites. Extended journey times can be experienced during transfers from Grantham Hospital to Lincoln County Hospital at peak times. This is due to the location of Lincoln County Hospital and the route taken. Whilst these are not necessarily time critical for all patients, the additional time taken by EMAS resources to complete the transfer and be available for further details does have a consequent effect on EMAS capacity at certain times of the day.

The eastern bypass would free up valuable EMAS resource time by eliminating the delays currently experienced on Cross o'Cliff Hill, Canwick Road, Broadgate and Lindum Road.

- *How will the Eastern Bypass address these problems and constraints?*

EMAS covers a wide geographical area and is required to meet very strict response time targets. Anything which impacts on capability to respond within specific timeframes has a consequent impact on patient care. Whilst EMAS plans for congestion, EMAS is required to operate within the Highway Code, consequently the use of blue lights and sirens only applies to time critical events – travelling to 999 calls or blue light transportation. Where a patient has been attended and requires transportation to hospital, but does not meet blue light criteria, EMAS is required to operate within the Highway Code and has no exemptions. This can result in journey time being increased due to traffic congestion which has a knock on effect to future calls.

- *What will Lincoln Eastern Bypass do to help you achieve your goals and objectives?*

Support speedy response to emergencies and reduce transportation time.

- *What direct benefits will the scheme have for your business/organization?*

Support response time targets and free up EMAS resources by reducing time taken per patient episode.

- *Are there any actions and plans you would expect to implement when the bypass is built that you would be unable to undertake without the scheme?*

EMAS is constantly reviewing its service delivery model to ensure patients receive a timely response. Without this scheme EMAS will continue to deploy resources north and south of the City to offset congestion problems. There will, however, be occasions when EMAS resources will be required to respond across the City and this will impact on response times during periods of congestion. The issues related to transportation and inter hospital transfers will continue pending a bypass being in place.

- *Are there any specific benefits, especially related to economic regeneration that you would expect to see as a result of the scheme?*

Unable to comment at this time.

- *What will be the negative effects on your business/organisation if the scheme cannot be built?*

Delayed response and delays in transfer to places of definitive care due to traffic congestion.

Please do not hesitate to contact me should you require any further information or clarification.

Yours sincerely

**Pete Jones**  
**Assistant Director of Operations**





**LINCOLNSHIRE ROAD SAFETY PARTNERSHIP**  
**Witham House**  
**Pelham centre**  
**Canwick road,**  
**Lincoln LN5 8HE**

Telephone: **101 ext 5815**  
E-mail: **simon.heads@lincs.pnn.police.uk**

11<sup>th</sup> February 2015

Mr Lee Rowley  
Communities, Highways and Traffic  
Technical Services Partnership  
5th Floor  
Mill house  
Brayford Wharf North  
LINCOLN  
LN1 1YT

Dear Mr Rowley

**RE: PROPOSED EASTERN BYPASS OF LINCOLN**

Thank you for the opportunity to comment on the proposed eastern bypass in Lincoln on behalf of Lincolnshire police. The position of Lincolnshire police remains the same as that articulated by Chief Superintendent Hardy in his letter of 7<sup>th</sup> of July 2011. Namely, that we whole heartedly support the principle of having the bypass and that it would improve police response times overall.

I am aware that the proposals include the closure of Hawthorn Road and introduction of a restricted move junction. This closure and introduction of a restricted move junction is a matter for the appropriate authorities and local democracy and not the police, so we take the position of neutrality in relation to this.

I have considered the Hawthorn Road closure, and proposed junction, in respect of police response times to villages such as Cherry Willingham. In my professional judgement these specific parts of the proposal would have little effect on police response times.

Yours sincerely

**Inspector Simon Heads**

<b>TECHNICAL SERVICES PARTNERSHIP</b>		
FILE		
13 FEB 2015		
ALLOC	INITIALS	DATE



[www.lincs.police.uk](http://www.lincs.police.uk)

**LINCOLNSHIRE POLICE**

serving with **PRIDE**

Chief Fire Officer: Dave Ramscar

Our Ref : LR/RH

Lincolnshire Fire and Rescue  
South Park Avenue  
Lincoln  
LN5 8ELMr L Rowley IEng AMICE  
Senior Project Leader  
Communities, Highways & Traffic  
Technical Services Partnership  
5<sup>th</sup> Floor  
Mill House  
Brayford Wharf North  
LINCOLN LN1 1YT

17 February 2015

Dear Lee,

**Lincoln Eastern Bypass (LEB) and Hawthorn Road, Lincoln**

Further to our meeting yesterday, I am writing to confirm that I have been contacted by the Hawthorn Road Action Group and as a result commissioned some work internally to look at what impact, if any, there would be on response times for emergency vehicles with the LEB in place and the 'stop' on Hawthorn Road. As part of this work some modelling was undertaken using the Fire Service Emergency Cover (FSEC) toolkit which allows us to predictively model risk, perform quantitative assessment of changes to emergency response, fire appliance numbers and locations, crewing changes, specialist vehicles and other related issues.

In this instance the LEB routing and the stopping up of Hawthorn Road was replicated within FSEC in order to model response times from our two fire station locations within the city namely Lincoln South station on South Park Avenue and Lincoln North station on Nettleham Road. The models were based on travel times between the fire station locations and school locations within the villages of Reepham, Fiskerton and Cherry Willingham. Two models were run for each route to show 1. Travel times using the existing road network, and 2. Travel times with the LEB in place and Hawthorn Road 'stopped'. The results of the models, which are attached to this letter, demonstrated that travel times improved with the exception of Reepham, which remained the same. The models for Reepham used the A158 on both occasions so the times remained the same.





Fire and Rescue worked closely with colleagues from East Midlands Ambulance Service (EMAS) due to both services responding from similar locations. The Ambulance and Fire station are adjacent to each other on South Park Avenue, and Ambulances regularly stand by in Waitrose carpark opposite the Nettleham Road fire station to cover the north of the city and surrounding villages.

If I can be of any further assistance then please do not hesitate to contact me.

Yours sincerely

Lynda Ramscar  
Integrated Risk Manager

[Lynda.ramscar@lincoln.fire-uk.org](mailto:Lynda.ramscar@lincoln.fire-uk.org)  
Direct dial : 01522 582311

Enc.



Hawthorne Road Action Group (HRAG) work – LFR travel times before and after Eastern Bypass:

Using the FSEC toolkit, LFR have modelled the 1<sup>st</sup> stage of the proposed Eastern Bypass to perform comparisons at four strategic locations.

The four locations chosen for this pre-emptive consultation work were:

- Reepham primary school – Road junction number = 16337
- Fiskerton primary school – Road junction number = 19196
- Cherry Willingham primary school (Top half of village) – Road junction number = 40064
- Cherry Willingham primary school (Bottom half of village) – Road junction number = 16284

The following table gives a breakdown of the comparisons for both the FSEC Basecase (Prior to the Bypass) and the HRAG Model (taking into consideration the Bypass). The same locations were chosen from each model and then the travel times from Lincoln North (C19) and Lincoln South (C20) Fire Stations were used.

	HRAG C19	Basecase C19	HRAG C20	Basecase C20	+ / - time
Reepham 16337	5m 49s	5m 49s	7m 52s	7m 52s	None
Fiskerton 19196	8m 25s	9m 37s	9m 13s	10m 37s	C19 = 1m 12s – C20 = 1m 24s –
Cherry Willingham (Top) 40064	5m 37s	6m 23s	7m	7m 30s	C19 = 46s – C20 = 30s –
Cherry Willingham (Bottom) 16284	6m 11s	6m 49s	6m 19s	7m 43s	C19 = 38s – C20 = 1m 24s –

The Reepham example used the A158 in both FSEC models; hence the same results being output.

Results were also obtained from FSEC with regards the Dwellings Model, again a comparison was performed prior to the road network being modified to reflect the new Eastern Bypass and after the new road had been modelled.

The County of Lincolnshire has since the 2011 Census had an increase of statistical boundaries called Output Areas (OA's). Prior to the 2011 Census there was 2264 OA's, but with the development of numerous new housing estates and an increase in population there has also had to be an increase in the amount of OA's from the 2264 to 2348.

FSEC uses a multitude of data elements to ascertain risk for the 4 distinct models, but the main model used as a comparison for this work is the Dwellings Model.

A count is performed to see what the risk level of each Output Area is currently (Basecase) and then when any alterations are made to the Basecase, the HRAG bypass work for example another count is performed to see if any changes have occurred and if so further granulation into where and why?

FSEC OA Risk Level	Basecase	HRAG Model	Difference + / -
Very High	1971	1971	None
High	185	185	None
Medium	109	109	None
Low	35	35	None
Very Low	48	48	None



Supporting screenshots for appliance travel time comparisons:

Basecase Model Reepham 16337:

WINGS TEST FRS; Current Dataset :07TH NOV 2014 - PRE INC DATA; Current Overlay: Roads Junctions and Stations; Mode: DETAIL

File Setup Action Edit Overlay Find Scale Maps Measure Dump Road Network Risk Assessment Response Vehicles and Scenarios Modelling Documentation Fire Alarms No

**Road Junction**

Road Junction Grid Ref 503845 373645 3:20187 3:20187 3:20187 3:20187

Junction Number  Junction Name

Nearest Stations (Travel Time in mins)  Genuine Dead End Station Key

Station	C19	C20	C38	C35	C27	C29
Travel Time	5.49	7.52	10.47	11.84	12.39	12.96

Station	C25	C26	C02	T15	C16	HUMD
Travel Time	17.29	17.38	19.39	21.98	22.18	24.69

Station	T13	C08	C13	T16	C31	C04
Travel Time	24.82	25.03	25.19	25.64	25.74	25.88

Station	C09	C05	C37	C22	T11	T12
Travel Time	27.17	27.18	27.97	29.10	29.95	30.35

Station	HUMD	C33	HUMD	C14	HUMC5	HUMD
Travel Time	31.56	33.64	34.70	34.78	36.31	38.16

DLG version 1-1

# HRAG Model Reepham 16337:

WINGS TEST FR: Current Dataset : 1ST DEC 2014 - HAWTHORNE ROAD; Current Overlay: Roads Junctions and Stations; Mode; DETAIL

File Setup Action Edit Overlay Find Scale Maps Measure Dump Road Network Risk Assessment Response Vehicles and Scenarios Modelling Documentation Fire Alarms Non-geo

### Road Junction

Road Junction Grid Ref 503845 373645 3:20187 3:20187 3:20187 3:20187

Junction Number  Junction Name

Nearest Stations (Travel Time in mins)  Genuine Dead End Station Key

Station	C19	C20	C38	C35	C27	C29
Travel Time	5.49	7.52	10.47	11.84	12.39	12.96

Station	C25	C26	C02	T15	C16	C31
Travel Time	17.29	17.38	19.39	21.98	22.18	24.22

Station	HUMD	T13	C08	C13	T16	C04
Travel Time	24.69	24.82	25.03	25.19	25.64	25.88

Station	C09	C05	C37	C22	T11	T12
Travel Time	27.17	27.18	27.97	29.10	29.95	30.35

Station	HUMD	C33	HUMD	C14	HUMC5	C03
Travel Time	31.56	33.64	34.70	34.78	36.31	36.67

View All

DLG version 1-1

Map showing Reepham area with highlighted green routes and station markers. Labels include Reepham Manor, Cricket Ground, Leigh Farm, Dairy Farm, and Reepham. A 'Hall' is marked with a 21m distance.



Basecase Model Fiskerton 19196:

WINGS TEST FRS: Current Dataset :07TH NOV 2014 - PRE INC DATA; Current Overlay: Roads Junctions and Stations: Mode: DETAIL

File Setup Action Edit Overlay Find Scale Maps Measure Dump Road Network Risk Assessment Response Vehicles and Scenarios Modelling Documentation

**Road Junction**

Road Junction Grid Ref 505131 372092 3:23579 3:23579 3:23579 3:23579

Junction Number 19196 Junction Name

Nearest Stations (Travel Time in mins)  Genuine Dead End Station Key

Station	C19	C20	C38	C35	C27	C02
Travel Time	8.97	9.97	13.95	14.29	14.84	15.67

Station	C29	C26	C25	T15	C16	C37
Travel Time	15.96	19.83	20.77	24.43	25.29	26.49

Station	C08	T13	T16	HUMD	C31	C04
Travel Time	27.48	27.82	28.09	28.17	28.19	28.33

Station	C13	C09	C05	C22	T12	T11
Travel Time	28.67	30.65	30.66	32.58	33.35	33.43

Station	HUMD	C33	C14	HUMD	HUMC5	C03
Travel Time	35.04	36.75	37.23	38.18	39.79	40.64

Station Key

- C13 GAINSBOROUGH Inside Brig
- C25 MARKET RASEN Inside Brig
- C09 CAISTOR Inside Brig
- C05 BINBROOK Inside Brig
- C22 LOUTH Inside Brig
- C23 MABLETHOPPE Inside Brig
- C01 ALFORD Inside Brig
- C30 SKEGNESS Inside Brig
- C33 SPILSBY Inside Brig
- C36 WAINFLEET Inside Brig
- C28 NORTH SOMERCOTE Inside Brig
- C16 HORNCastle Inside Brig
- C37 WOODHALL SPA Inside Brig
- C26 METHERINGHAM Inside Brig
- C04 BILLINGHAY Inside Brig
- C35 WADDINGTON Inside Brig
- C27 NORTH HYKEHAM Inside Brig
- C29 SAXILBY Inside Brig
- C02 BARDNEY Inside Brig
- C38 WRAGBY Inside Brig
- C19 LINCOLN NORTH Inside Brig
- C31 SLEAFORD Inside Brig
- C08 BRANT BROUGHTON Inside Brig
- C14 GRANTHAM Inside Brig

View All

HRAG Model Fiskerton 19196:

WINGS TEST FRS; Current Dataset :1ST DEC 2014 - HAWTHORNE ROAD; Current Overlay: Roads Junctions and Stations; Mode:

File Setup Action Edit Overlay Find Scale Maps Measure Dump Road Network Risk Assessment Response Vehicles and Scenarios Modelling D

### Road Junction

Road Junction Grid Ref 505131 372092 3:23579 3:23579 3:23579 3:23579

Junction Number  Junction Name

Nearest Stations (Travel Time in mins)  Genuine Dead End Station Key

Station	C19	C20	C35	C27	C38	C02
Travel Time	8.25	8.73	12.99	13.60	13.95	15.67

Station	C29	C26	C25	T15	C31	C16
Travel Time	15.72	18.14	20.77	23.19	24.79	25.29

Station	C08	C37	C04	T16	HUMD	T13
Travel Time	25.91	26.49	26.64	26.85	27.45	27.58

Station	C13	C09	C05	C22	T11	T12
Travel Time	27.95	30.65	30.66	32.58	32.71	33.11

Station	HUMD	C14	C33	C03	HUMD	HUMC5
Travel Time	34.32	35.66	36.75	37.24	37.46	39.79

- C13 GAINSBOROUGH Insc
- C25 MARKET RASEN Insc
- C09 CAISTOR Inside Brigad
- C05 BINBROOK Inside Briga
- C22 LOUTH Inside Brigade /
- C23 MABLETHOPRE Inside
- C01 ALFORD Inside Brigade
- C30 SKEGNESS Inside Briga
- C33 SPILSBY Inside Brigade
- C36 WAINFLEET Inside Brig
- C28 NORTH SOMERCOTE
- C16 HORNCastle Inside B
- C37 WOODHALL SPA Insc
- C26 METHERINGHAM Insc
- C04 BILLINGHAY Inside Brig
- C35 WADDINGTON Inside B
- C27 NORTH HYKEHAM Ins
- C29 SAXILBY Inside Brigade
- C02 BARDNEY Inside Brigad
- C38 WRAGBY Inside Brigad
- C19 LINCOLN NORTH Insc
- C31 SLEAFORD Inside Briga
- C08 BRANT BROUGHTON
- C14 GRANTHAM Inside Brig



# Basecase Model Cherry Willingham (Top Half) 40064:

WINGS TEST FRS; Current Dataset :07TH NOV 2014 - PRE INC DATA; Current Overlay: Roads Junctions and Stations; Mode: DETAIL

File Setup Action Edit Overlay Find Scale Maps Measure Dump Road Network Risk Assessment Response Vehicles and Scenarios Modelling Documentation Fire Alarms Non-geo data Audit Help

**Road Junction**

Road Junction Grid Ref 503147 373228 3:50524 3:50524 3:50524 3:50524

Junction Number  Junction Name

Nearest Stations (Travel Time in mins)  Genuine Dead End Station Key

Station	C19	C20	C38	C35	C27	C29
Travel Time	5.83	7.30	11.10	11.62	12.17	13.29

Station	C26	C25	C02	T15	C16	C08
Travel Time	17.16	17.92	19.87	21.76	22.81	24.81

Station	HUMD	T13	T16	C31	C13	C04
Travel Time	25.05	25.15	25.42	25.52	25.55	25.66

Station	C37	C09	C05	C22	T11	T12
Travel Time	27.75	27.80	27.81	29.73	30.31	30.68

Station	HUMD	C33	C14	HUMD	HUMC5	C03
Travel Time	31.92	34.27	34.56	35.06	36.94	37.97

Station Key

- C13 GAINSBOROUGH Inside Brig
- C25 MARKET RASEN Inside Brig
- C09 CAISTON Inside Brig
- C05 BINBROOK Inside Brig
- C22 LOUTH Inside Brig
- C23 MABLETHORPE Inside Brig
- C01 ALFORD Inside Brig
- C30 SKEGNESS Inside Brig
- C33 SPILSBY Inside Brig
- C36 WAINFLEET Inside Brig
- C28 NORTH SOMERCOTE Inside Brig
- C16 HORNCastle Inside Brig
- C37 WOODHALL SPA Inside Brig
- C26 METHERINGHAM Inside Brig
- C04 BILLINGHAY Inside Brig
- C35 WADDINGTON Inside Brig
- C27 NORTH HYKEHAM Inside Brig
- C29 SAXILBY Inside Brig
- C02 BARDNEY Inside Brig
- C38 WRAGBY Inside Brig
- C19 LINCOLN NORTH Inside Brig
- C31 SLEAFORD Inside Brig
- C08 BRANT BROUGHTON Inside Brig
- C14 GRANTHAM Inside Brig

View All

Cherry Willingham



# HRAG Model Cherry Willingham (Top Half) 40064:

WINGS TEST FRS: Current Dataset : 1ST DEC 2014 - HAWTHORNE ROAD; Current Overlay: Roads Junctions and Stations; Mode: DETAIL

File Setup Action Edit Overlay Find Scale Maps Measure Dump Road Network Risk Assessment Response Vehicles and Scenarios Modelling Documentation Fire Alarms Non-geo data Audit Help

The screenshot displays a map of Cherry Willingham with a highlighted fire route in green. A 'Road Junction' window is open, showing details for junction 40064. The window includes a table of nearest stations and their travel times, a station key, and a list of nearby fire stations.

**Road Junction**

Road Junction Grid Ref 503147 373228 3:50524 3:50524 3:50524 3:50524

Junction Number 40064 Junction Name

Nearest Stations (Travel Time in mins)  Genuine Dead End

Station	C19	C20	C38	C35	C27	C29
Travel Time	4.97	7.00	11.10	11.32	11.87	12.44

Station	C26	C25	C02	T15	C16	C31
Travel Time	16.60	17.92	18.91	21.46	22.81	23.25

Station	HUMD	T13	C08	C13	C04	T16
Travel Time	24.17	24.30	24.37	24.67	25.10	25.12

Station	C37	C09	C05	T11	C22	T12
Travel Time	27.19	27.80	27.81	29.43	29.73	29.83

Station	HUMD	C14	HUMD	C33	C03	HUMC5
Travel Time	31.04	34.12	34.18	34.27	35.70	36.94

Station Key

- C13 GAINSBOROUGH Insk
- C25 MARKET RASEN Inside
- C09 CAISTOR Inside Brigadi
- C06 BINBROOK Inside Brige
- C22 LOUTH Inside Brigadi
- C23 MABLETHORPE Inside
- C01 ALFORD Inside Brigadi
- C30 SKEGNESS Inside Brige
- C33 SPILSBY Inside Brigadi
- C36 WAINFLEET Inside Brige
- C28 NORTH SOMERCOTE
- C16 HORNCastle Inside B
- C37 WOODHALL SPA Insk
- C26 METHERINGHAM Insk
- C04 BILLINGHAY Inside Brige
- C35 WADDINGTON Inside
- C27 NORTH HYKEHAM Insk
- C29 SAXILBY Inside Brigadi
- C02 BARDNEY Inside Brigadi
- C38 WRAFGBY Inside Brigadi
- C13 LINCOLN NORTH Insk
- C31 SLEAFORD Inside Brige
- C08 BRANT BROUGHTON
- C14 GRANTHAM Inside Brige

View All

Basecase Model Cherry Willingham (Bottom Half) 16284:

WINGS TEST FRS: Current Dataset :07TH NOV 2014 - PRE INC DATA: Current Overlay: Roads Junctions and Stations; Mode; DETAIL

File Setup Action Edit Overlay Find Scale Maps Measure Dump Road Network Risk Assessment Response Vehicles and Scenarios Modelling Documentation Fire Alarms Non-geo data Audit Help

**Road Junction**

Road Junction Grid Ref 502790 372282 3:20133 3:20133 3:20133 3:20133

Junction Number 16284 Junction Name

Nearest Stations (Travel Time in mins)  Genuine Dead End Station Key

Station	C19	C20	C35	C27	C38	C29
Travel Time	6.49	7.43	11.75	12.30	12.64	13.42

Station	C26	C02	C25	T15	C16	C08
Travel Time	17.29	19.31	19.46	21.89	24.35	24.94

Station	T13	T16	C31	C04	HUMD	C13
Travel Time	25.28	25.55	25.65	25.79	26.04	26.54

Station	C37	C09	C05	T12	C22	T11
Travel Time	27.88	29.34	29.35	30.81	31.27	31.30

Station	HUMD	C14	C33	HUMD	C03	HUMC5
Travel Time	32.91	34.69	35.81	36.05	38.10	38.48

Station Key

- C13 GAINSBOROUGH Inside Brig
- C25 MARKET RASEN Inside Brig
- C09 CAISTOR Inside Brig
- C05 BINBROOK Inside Brig
- C22 LOUTH Inside Brig
- C23 MABLETHORPE Inside Brig
- C01 ALFORD Inside Brig
- C30 SKEGNESS Inside Brig
- C33 SPILSBY Inside Brig
- C38 WAINFLEET Inside Brig
- C28 NORTH SOMERCOTE
- C16 HORNCastle Inside B
- C37 WOODHALL SPA Inside B
- C26 METHERINGHAM Inside Brig
- C04 BILLINGHAY Inside Brig
- C35 WADDINGTON Inside B
- C27 NORTH HYKEHAM Inc
- C29 SAXILBY Inside Brig
- C02 BARDNEY Inside Brig
- C38 WRAGBY Inside Brig
- C19 LINCOLN NORTH Inside Brig
- C31 SLEAFORD Inside Brig
- C08 BRANT BROUGHTON
- C14 GRANTHAM Inside Brig

[View All](#)



# HRAG Model Cherry Willingham (Bottom Half) 16284:

WINGS TEST FRS: Current Dataset : 1ST DEC 2014 - HAWTHORNE ROAD; Current Overlay: Roads Junctions and Stations; Mode: DETAIL

File Setup Action Edit Overlay Find Scale Maps Measure Dump Road Network Risk Assessment Response Vehicles and Scenarios Modelling Documentation Fire Alarms Non-geo data Audit Help

### Road Junction

Road Junction Grid Ref: 502790 372282    3:20133 3:20133 3:20133 3:20133

Junction Number: 16284    Junction Name:

Nearest Stations (Travel Time in mins)     Genuine Dead End    Station Key

Station	C19	C20	C35	C27	C38	C29
Travel Time	5.71	6.19	10.45	11.06	12.64	13.18

Station	C26	C02	C25	T15	C31	C08
Travel Time	15.60	17.91	19.46	20.65	22.25	23.37

Station	C04	T16	C16	HUMD	T13	C13
Travel Time	24.10	24.31	24.35	24.91	25.04	25.41

Station	C37	C09	C05	T11	T12	C22
Travel Time	26.19	29.23	29.35	30.17	30.57	31.27

Station	HUMD	C14	C03	HUMD	C33	HUMD
Travel Time	31.78	33.12	34.70	34.92	35.81	38.38

Station Key:

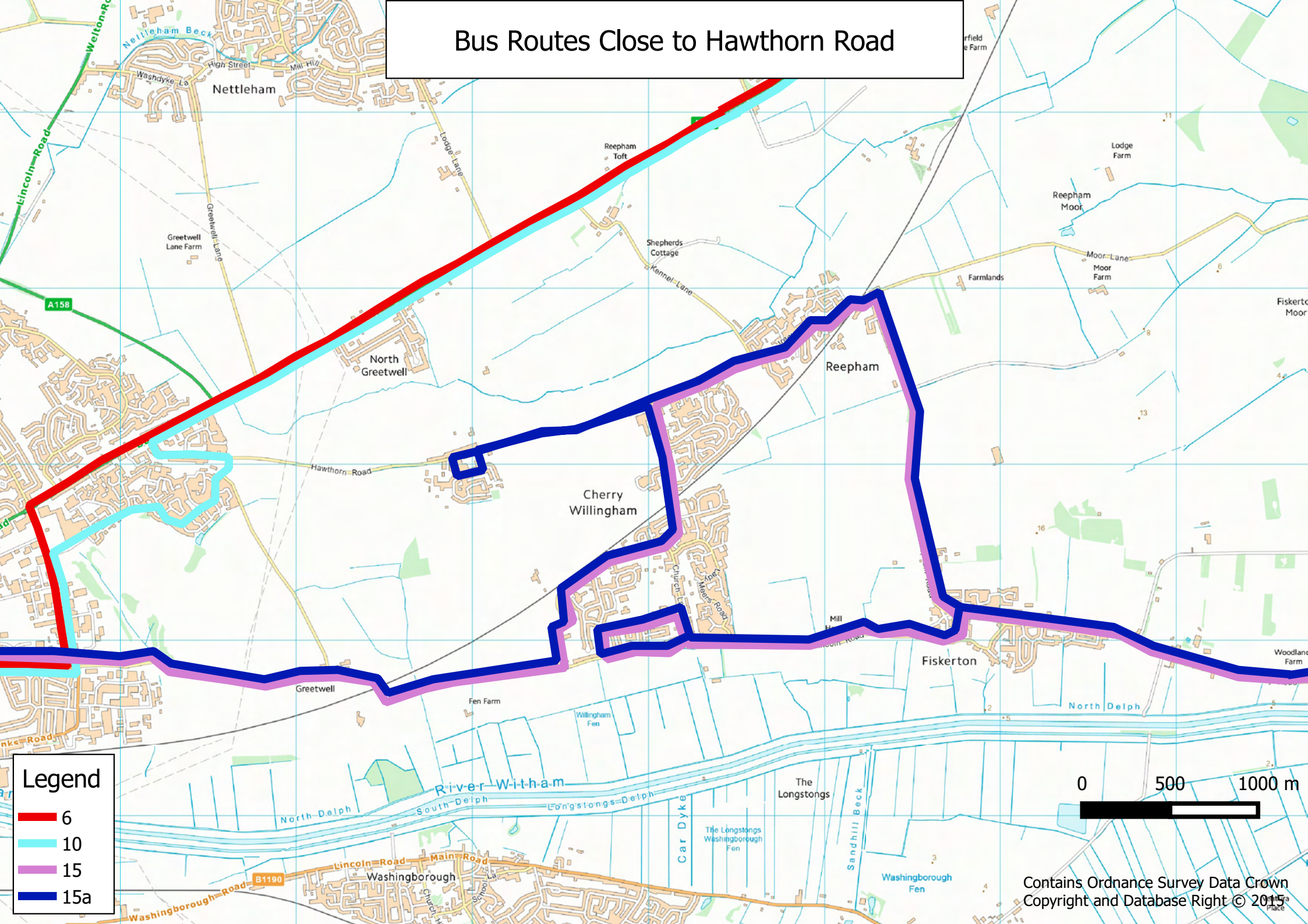
- C13 GAINSBOROUGH Insk
- C29 MARKET RASEN Insk
- C09 CAISTOR Inside Brigad
- C05 BINBROOK Inside Briga
- C22 LOUTH Inside Brigade /
- C23 MABLETHORPE Insk
- C01 ALFORD Inside Brigade
- C30 SKEGNESS Inside Briga
- C33 SPILSBY Inside Brigade
- C36 WAINFLEET Inside Brig
- C28 NORTH SOMERCOTE Insk
- C16 HORNCastle Inside B
- C37 WOODHALL SPA Insk
- C26 METHERINGHAY Insk
- C04 BILLINGHAY Inside Brig
- C35 WADDINGTON Inside i
- C27 NORTH HYKEHAM Insk
- C25 SAILBY Inside Brigade
- C02 BARDNEY Inside Brigad
- C38 WRAGBY Inside Brigad
- C19 LINCOLN NORTH Insk
- C31 SLEAFORD Inside Briga
- C08 BRANT BROUGHTON Insk
- C14 GRANTHAM Inside Briga

[View All](#)

**Appendix H:  
Plan Showing Routes of Bus Services Close to  
Hawthorn Road**



# Bus Routes Close to Hawthorn Road

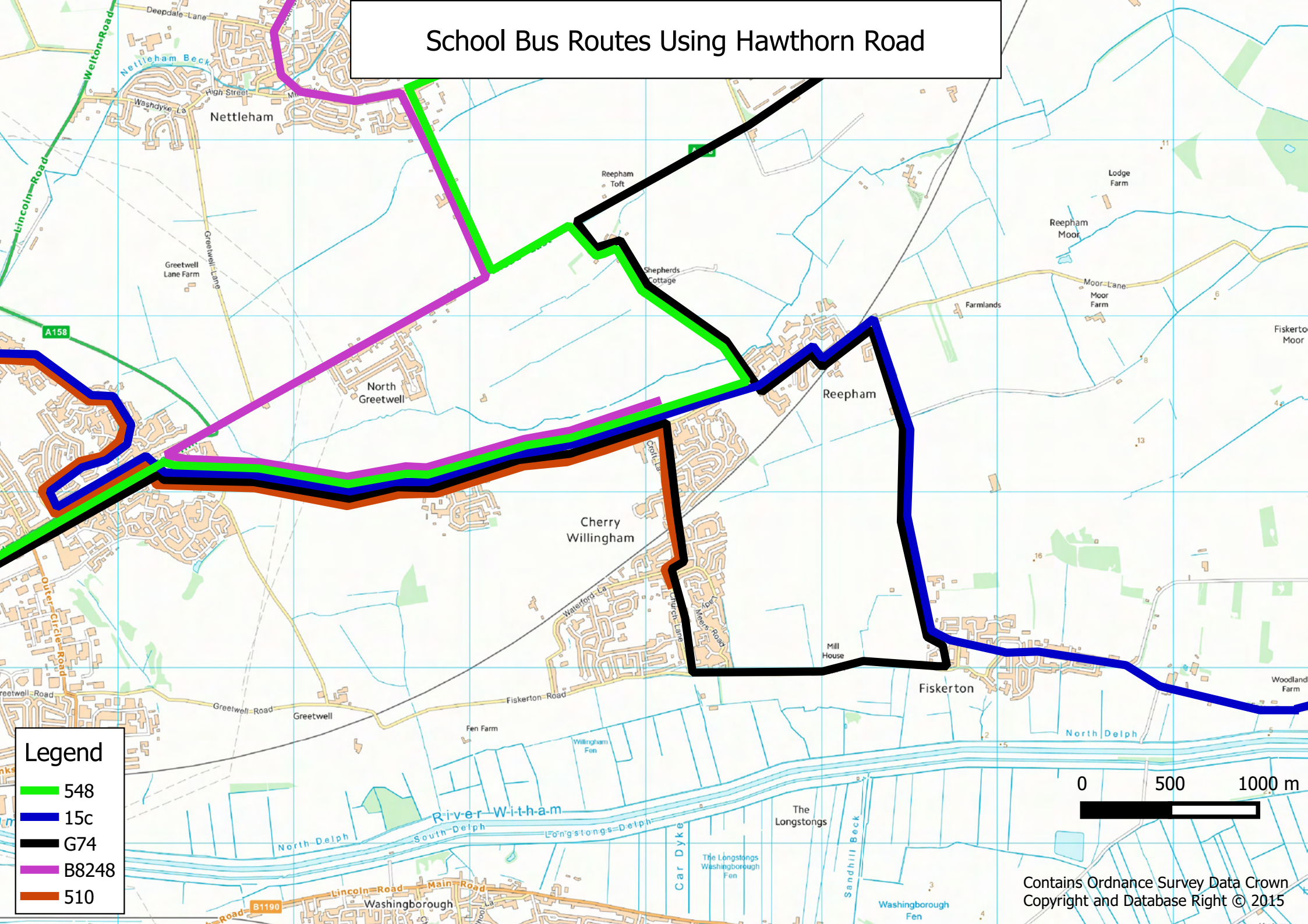


- Legend**
- 6
  - 10
  - 15
  - 15a

0 500 1000 m



# School Bus Routes Using Hawthorn Road



**Legend**

- 548
- 15c
- G74
- B8248
- 510

**Appendix I:  
Consultation with Bus Operators**



17 April 2015

Mr L Rowley  
Senior Project Leader  
Lincolnshire County Council  
Highways Alliance  
Technical Services Partnership  
5<sup>th</sup> Floor, Mill House  
Brayford Wharf North  
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Customer Services 0345 605 0 605



Dear Mr Rowley

**LINCOLNSHIRE EASTERN BYPASS RELIEF ROAD:  
LETTER OF SUPPORT – STAGECOACH EAST MIDLANDS**

Further to our meeting on Friday 20 March 2015 along with Michelle Hargreaves, our Managing Director, and Dr Gary Billington from Mouchel, I write to confirm that Stagecoach East Midlands continues to support the proposals for the Lincoln Eastern Bypass Relief Road.

Much of the content of our previous letter of support for the Eastern Bypass dated 16 May 2011 remains applicable four years further down the line from your original application including the Lincoln fleet size, staffing and passenger numbers. Consequently, I enclose the previous letter for your information.

Since 2011 we have continued to work with Lincolnshire County Council and the City of Lincoln Council to develop and promote bus services in Lincoln. This has included introducing more modern buses and working with highway officers to improve key junctions and traffic flow.

Traffic congestion and the associated delays remain the most significant external factor affecting the delivery of punctual, reliable bus services in Lincoln. It is the unpredictable nature of traffic flows and lack of consistency in bus running times that forms the biggest challenge for our service planners.

Having studied the route of the Eastern Bypass I can confirm that it will have no adverse effects on the core bus routes forming Lincoln's main bus network. There may be a requirement to amend some school bus routes although we do not envisage that this will present any insurmountable difficulties.

The conclusions of our 2011 submission set out the benefits that the new road is likely to bring for traffic conditions and bus service operation in Lincoln and remain valid. For these reasons Stagecoach East Midlands continues to support Lincolnshire County Council's proposals to construct the Eastern Bypass.

Should you require any further information regarding the above please do not hesitate to contact us.

Yours sincerely

David Skepper  
**COMMERCIAL DIRECTOR**

Copies:

Michelle Hargreaves, Managing Director, Stagecoach East Midlands  
Dr Gary Billington, Technical Director, Mouchel  
Anita Ruffle, Group Manager, Public Transport



16 May 2011

Mr D Skeet  
Senior Project Leader  
Technical Services Partnership  
Lincolnshire County Council  
Witham Park House  
Waterside South  
Lincoln  
LN5 7JN

Dear Mr Skeet

**LINCOLN EASTERN BYPASS RELIEF ROAD:  
BENEFITS FOR BUSES**

I write on behalf of Stagecoach East Midlands to confirm our support for the proposal to construct the eastern section of the Lincoln Bypass Relief road.

At first glance it may seem strange that a public transport operator would support the case for a bypass relief road, which would directly benefit car borne traffic rather than alternative modes. However, some analysis of the information set out below will reveal how removing extraneous traffic from the city and its residential environs will significantly minimise the unreasonable and unpredictable effect of delays to our bus operations. At the moment these traffic delays adversely affect our ability to deliver the bus service and place undue pressure upon our front line operating staff. More importantly, is the effect the detrimental traffic conditions have on our customers through longer journey times and lower frequency services compared to other urban operations. I am convinced that the bypass scheme will not only enable Stagecoach to deliver better services it will also contribute to economic regeneration and reducing carbon emissions.

Background

Stagecoach East Midlands is the major bus operator in the East Midlands running 500 buses and employing 1,400 staff. We have eight depots based in Lincoln, Hull, Grimsby, Skegness, Gainsborough, Newark, Mansfield and Worksop and we carry 52 million passengers over 22 million miles each year. Over 80% of our bus services in the East Midlands are operated commercially, i.e. they receive no direct subsidy support from local authorities.



Our Lincoln Depot has an allocation of 85 buses and employs 220 staff. The operation carries 7 million passengers over 3.4 million miles each year with the majority of these journeys being taken with the city and the surrounding residential suburbs. The depot runs a higher than company average proportion of commercial bus mileage in the city, which is expected from a densely populated urban bus operation.

Buses are run in Lincolnshire through a strong quality partnership with Lincolnshire County Council that sees bus operators investing in modern vehicles, service quality and frequency enhancement, staff training, ticketing initiatives, new technology, and proactive marketing. The authority supports this investment through the provision of complementary supported service provision in some weaker areas of the bus network, good quality bus infrastructure, roadside and web based bus information, and real time on key routes.

#### April 2006 revision

At the acquisition of the Lincoln business by Stagecoach in 2006 an extensive network review took place to modernise bus services in the city.

Analysis of the existing passenger base showed that 82% of bus journeys were between the residential areas and the city centre with an obvious potential to generate new bus use. Despite this clear fact some peripheral circular bus services were being maintained against a background of falling use, wasting resource.

Looking at the route network there is little in the way of bus priority measures in the city with three short lengths of bus lane in the lower High Street, outside the bus station, and through a bus gate near the Cathedral Quarter. Moreover, given traffic volumes there are very few opportunities for the Highway Authority to introduce bus priority measures without impacting on the road network's ability to cope flows despite some very clear "hot spots" for bus delays:

- High Street/Dixon Street junction
- High Street/St Mark Street junction
- Lindum Road inbound tailbacks from Monks Road/Broadgate junction
- Silver Street tailbacks at Broadgate junction
- Pottergate/Lindum Road, difficulties for inbound buses turning right
- Cross O'Cliff/Newark Road junction inbound delays
- Brant Road/Newark Road junction inbound delays
- Canwick Avenue/Canwick Hill inbound delays
- Pelham Bridge inbound delays am peak, and outbound delays pm peak
- Wragby Road/Outer Circle Road junction

The other main notable factor in traffic congestion is the frequent closure of the High Street Railway Level Crossing.



The Stagecoach management team took the decision to revise bus services in the area to run as effectively as possible in the existing traffic conditions with the objectives of maximising the attractiveness of the public transport offer through better service quality, enhanced frequencies, and flexible ticketing whilst trying to improve the robustness of the schedules. This was achieved through:

- A substantial influx of low floor buses being moved into the Lincoln fleet to ensure that all key city bus routes are run by accessible buses less than 10 years old, making travel easier for families with buggies, older customers, and disabled people.
- Simple routes, direct journeys, reduced waiting times.
- Three turn up and go services – Ermine, Birchwood, & North Hykeham
- Comprehensive bus guide – colour coded routes, easy to understand
- Clear, readily available bus information – bus guide, website, Traveline, on street publicity.
- Flexible ticketing: – Day Rider, Megarider – offering value for money.
- A modern, attractive image for Lincoln buses with brand name appeal.

### Rise in Bus Patronage

The Lincoln population responded to the revision of the bus network with an increase in use:

- From 2005 to 2011 bus use in the city has increased by 40% from a weekly average of 90,000 journeys on the city network to 127,000.
- Weekly ticket sales rose from a weekly average of 267 in 2005 to 2,000 in 2011.

It is important to note that this growth in bus use has been realised solely on the basis of improving service quality, raising frequencies, and reducing the cost of travel to regular bus users. This clearly demonstrates that Lincoln people are willing to use public transport where it is perceived to be convenient and of a good standard.

### Traffic Congestion

Although we are always trying to continually improve our service quality it is our view that further bus use growth is now constrained by traffic conditions in the city and the lack of bus priority measures.

It is very difficult to persuade motorists to leave their cars at home and use public transport for journeys into the city when the buses are waiting in the same queue that they would have encountered in their private travel mode, i.e. there is no advantage offered by



Lincoln buses. Moreover, it usually takes people longer to start the journey by bus given that they usually have a short walk to the stop and then the wait for the bus to arrive although it can be argued that this is compensated to some extent at the destination by being able to alight at a more convenient point and avoid the delay of parking.

The major barrier constraining growth, and hampering current delivery levels, is the increase in costs required to maintain the existing bus punctuality. Over the last fifteen years bus running times on the core routes have been increased by 25% simply to account for traffic delays. On an unchanged comparable service frequency, such as Service 66 City – Birchwood, this simply increases costs by 25% against the same revenue levels making it difficult maintain discounted fares for regular users.

We need to ensure that we maintain punctuality for two important reasons: (a) industry survey work shows repeatedly that the most important consumer factor in bus services is reliability and (b) all bus operators have an obligation placed upon them by the traffic commissioner to work to a target of 95% of all services being on time, i.e. not more than five minutes late.

In some cases the disruption caused by traffic congestion has led us to reduce service frequencies to increase running times to maintain our targets. Just over a year ago we reduced Service 27 City – North Hykeham to every 12 minutes from every 10 to give the same six buses on the cycle 72 minutes to complete a schedules circuit rather than 60 minutes. Whilst this has undoubtedly led to a more reliable bus service it cannot be denied that the frequency is less attractive.

### The High Street Rail Crossing

Bus routes between the city centre and the southern residential areas are markedly busier than those from the north. All need to cross the railway line bisecting the city centre core. Traditionally, this was achieved by buses inbound and outbound over the High Street Rail Crossing from Lincoln Central Station.

Independent monitoring of rail crossing closures show that the closures have become longer and more frequent and the resulting stationary traffic takes longer to begin to move again as traffic levels in the city rise. Clearly, this has a detrimental effect on the bus service.

During 2010 working with Lincolnshire County Council Highways we took the decision to reroute inbound buses along Portland Street, which achieved a 9% improvement in punctuality. This is a relatively short term fix to improve reliability as (a) traffic congestion is increasing on this route and (b) in the longer term this will not remain a suitable road for bus traffic given local environmental and parking concerns.

There is no suitable alternative for outbound buses to traversing the railway crossing.



## Conclusion

All of the above demonstrates that rising traffic levels in Lincoln are adversely affecting the bus service and placing constraints on growth. And impacting upon the local environment an carbon emissions. In summary the issues are:

- Traffic levels in Lincoln are progressively rising, which is leading to increased congestion and pollution.
- Traffic delays are adversely impacting on our ability to deliver reliable bus services to our customers and we are incurring continued cost increases to our business as we adjust schedules to try to manage out the effects of congestion.
- Longer running times and increased costs impact upon the attractiveness of the bus as an alternative travel mode impacting upon bus fares and patronage creating a cyclical, negative effect. This is despite a clear indication of the willingness towards modal shift if all elements of the service are correctly delivered.
- The historic nature of Lincoln's city centre means road space is constrained.
- Rising traffic volumes means that road space cannot be easily given up exclusively to buses without a significant adverse effect on general traffic flows, which would further exacerbate current delays to buses.
- Other means of traffic management deployed in similar historic cities such as York and Cambridge, such as Park and Ride, are challenging in Lincoln without removing some extraneous traffic as it is difficult to create room for the supporting package of priority measures.
- Uniquely, Lincoln's worsening traffic conditions are being exacerbated by increased rail traffic through the city centre creating more frequent and longer High Street Crossing Closures.
- All of the above is impacting upon Lincoln's attractiveness as a retail and commerce centre, which will ultimately impact upon the city's economic sustainability. The economic regeneration and job creation in the city is being constrained.

Stagecoach East Midlands is engaged in all the good practice promoted by central government for responsible bus operators. We have strong relationships with all of Lincoln's key stakeholders including the City and County Councils, the Lincoln Business Improvement Group, and the Chamber of Commerce.

We support the proposal to construct an Eastern bypass, which will create an outer ring road taking away extraneous traffic that is currently passing through the city centre. This



will reduce traffic levels in centre Lincoln freeing up road space for buses. This will offer up the following opportunities:

- The provision of a raft of bus priority measures including bus lanes in the city centre improving bus journeys times, punctuality levels, and reliability. This will make the bus service more attractive generating more business.
- The potential to free up staff and vehicle resources through more efficient bus cycles, which can be reinvested in more frequent bus services and new route development.
- Better provision of public transport will encourage modal shift from the private car, which will help further reduce traffic congestion, pollution, and improve air quality.
- Create the necessary traffic conditions to develop Park and Ride for Lincoln, which will encourage more tourist and visitors to the city and reduce the need for valuable city centre land to be utilised for car parking.
- Enable the Bus Quality Partnership to develop good public transport to support new development and improve connections to retail, commerce, employment, education and healthcare.
- Stagecoach East Midlands will have a firmer base giving us encouragement to invest in new buses and local employment.
- Better bus services underpin the local economy creating the opportunities to grow new business, prosperity and employment.

Should you wish to discuss any of the above with us directly please feel free to contact me at any time.

Yours sincerely

David Skepper  
COMMERCIAL DIRECTOR



**Brylaine**

Investing in local service

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12 May, 2015  
Our ref;

Lee Rowley  
Senior Project Leader  
Technical Services Partnership  
Lincolnshire County Council  
Crown House  
Grantham Street  
Lincoln  
LN2 1BD

Dear Lee,

**Ref; Lincoln Eastern Bypass Project**

Further to our meeting of 6<sup>th</sup> May 2015 with regard the planned Lincoln Eastern Bypass Scheme, I would like to thank you for your time in explaining this scheme to me. Your candid approach allowed me to report back to my executives positively and effectively.

I would confirm that the benefits to our services entering the City from the East and in particular using the B1188 from the Branston direction will be positively welcomed, especially at peak traffic periods.

For this and the obvious effects of this scheme upon inner city traffic flow by taking through traffic away from the area of Pelham Bridge and the very difficult Lindum Hill, it is our intention that Brylaine Travel Ltd will fully support a positive continuation of this project and it is our hope that the forthcoming Public Inquiry will support its furtherance.

Assuring you of our fullest attentions at all times.

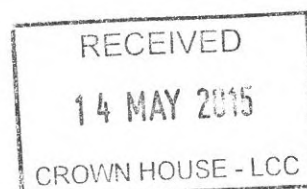
Yours sincerely

M P Wheatley  
Operations Director  
Brylaine Travel Ltd

**Directors**

Operations Director:  
Mr. Malcolm Wheatley  
Engineering Director:  
Mr. Brian Gregg  
Company Secretary:  
Mrs. Susan Bradshaw

Company No.  
4199399  
VAT Registration No.  
772 1029 48







**3rd July 2015**

**Dr Gary Billington  
Technical Director Transport  
Consulting  
Mouchel**

**Dear Gary**

**Ref: Eastern Bypass**

**Many thanks for taking your time to come and discuss the proposed Eastern Bypass**

**As a transport provider, improving the road network is beneficial to us in the fact that this will take away congestion from the town centre where most of our services are run**

**We would like to wish you every success in your bid to improve the local road networks**

**I trust that you will find this in order, however should you have any queries or require further assistance please do not hesitate to contact me**

**Yours Sincerely**

**Suzanne Traynor  
Operations Executive  
Email: [suzanne@pccoaches.co.uk](mailto:suzanne@pccoaches.co.uk)**